

AMENDMENTS TO THE SPECIFICATION

Please delete the paragraph at page 2, line 27, as shown below.

~~The invention and preferred modifications thereof are disclosed in claims 1 and 5.
Preferred embodiments thereof are described in the dependent claims.~~

Please delete the paragraph beginning on page 2, line 29 through page 3, line 6 and replace it with the following amended paragraph:

The present invention provides a method for diagnosis of autoimmune diseases of the GSE-type of associated with gluten sensitive enteropathy comprising taking a sample and testing the sample for antibodies against tissue transglutaminase and at least one other transglutaminase. In a preferred embodiment, the autoimmune disease is dermatitis herpetiformis, morbus Duhring, or an autoimmune disease selected from Addison's disease, AI (AI – autoimmune) haemolytic anaemia, AI thrombocytopenic purpura, AI thyroid diseases, IDDM, alopecia, atrophic gastritis – pernicious anaemia, Crohn's disease, hypoadrenalism, hypogonadism, hyposplenism, cryoglobulinism, colitis ulcerosa, Goodpasture syndrome, gluten-induced ataxia, IgA nephropathy or IgA glomerulonephritis, myasthenia gravis, partial lipodystrophy, polymyositis, primary biliary cirrhosis, primary sclerosing cholangitis, progressive systemic sclerosis, oral aphthosis, recurrent pericarditis, relapsing polychondritis, rheumatoid arthritis, rheumatism, sarcoidosis, sensory neuropathy, seizures, Sjögren's syndrome, SLE, splenic atrophy, type I (insulin-dependent) diabetes mellitus, diabetes mellitus of other types, transaminitis, Wegener granulomatosis, ulcerative colitis, vasculitis (both systemic and cutaneous), and vitiligo. A further group of autoimmune diseases that can be diagnosed or distinguished in this way is associated with infertility, increased risk of abortion and/or reduced ~~foetal~~ fetal growth.

Please delete the paragraph beginning on page 21, lines 6-20 and replace it with the following amended paragraph:

It has been known ~~hat~~ that GSE can provoke a T-cell mediated inflammation of the duodenojejunal bowel region causing various resorption disturbances (for review see Trejdosiewicz LK et al., Clin Gastr 1995;9:251-72). The latter may result in painful diarrhea, sideropenic anemia, hypoproteinemia, osteoporosis, amenorrhea, hypovitaminoses, and in children in retardation of growth and development (for review see Corazza GR, Gasbarrini G. Coeliac disease in adults. Bailliere Clin Gastr 1995;9:329-50; Littlewood JM. Coeliac disease in childhood. Bailliere Clin Gastr 1995;9:295-328.). Beside these direct consequences the persistence of the disease predisposes of various autoimmune disorders (e.g. diabetes type 1), and malignancies (e.g. duodenojejunal lymphomas). The clinical signs and symptoms of DH are mainly those of skin affection (polymorphic, itching blisters with underlying erythema typically located over the extensor surfaces of the big joints), the gastroenterological symptoms are often mild or clinically completely absent. However, the inflammatory small bowel changes can often be found by histological examination even if there are no clinical signs or symptoms suggesting jejunal pathology. The enteropathy in DH is morphologically, clinically and functionally identical with that in CD suggesting identical or very similar aetiology and pathomechanism of both of these two forms of GSE.

Please delete the paragraph beginning on page 22, lines 4-17 and replace it with the following amended paragraph:

Consequently, we provided a new method for diagnosis of autoimmune diseases of the GSE-type or associated with gluten sensitive enteropathy, essentially comprising taking a specimen and testing the specimen for antibodies against human tissue transglutaminase, or other transglutaminases. In this way autoimmune diseases other than coeliac disease can be diagnosed and distinguished, notably, dermatitis herpetiformis Duhring, Addison's disease, AI haemolytic anaemia, AI thrombocytopenic purpura, AI thyroid diseases, atrophic gastritis – pernicious anaemia, IgA nephropathy or IgA glomerulonephritis, myasthenia gravis, partial lipodystrophy, polymyositis, primary biliary cirrhosis, primary sclerosing cholangitis, recurrent pericarditis, relapsing polychondritis, rheumatoid arthritis, rheumatism, sarcoidosis, Sjogren's syndrome,

SLE, splenic atrophy, type I (insulin-dependent) diabetes mellitus, diabetes mellitus of other types, ulcerative colitis, vasculitis (both systemic and cutaneous) vitiligo as well as autoimmune diseases associated with female infertility (Collin et al., Gut, 1996: 39, 382-384), increased risk of abortion (Smecul et al., Eur. J. Gastr. & Hep. 1996; 8(1), 63-67), or reduced ~~foetal~~ fetal growth due to the presence of an autoimmune disease of the GSE-type or latent, non-active GSE.